

# Nuts and Bolts of a Pedestrian and Cyclist Count Program



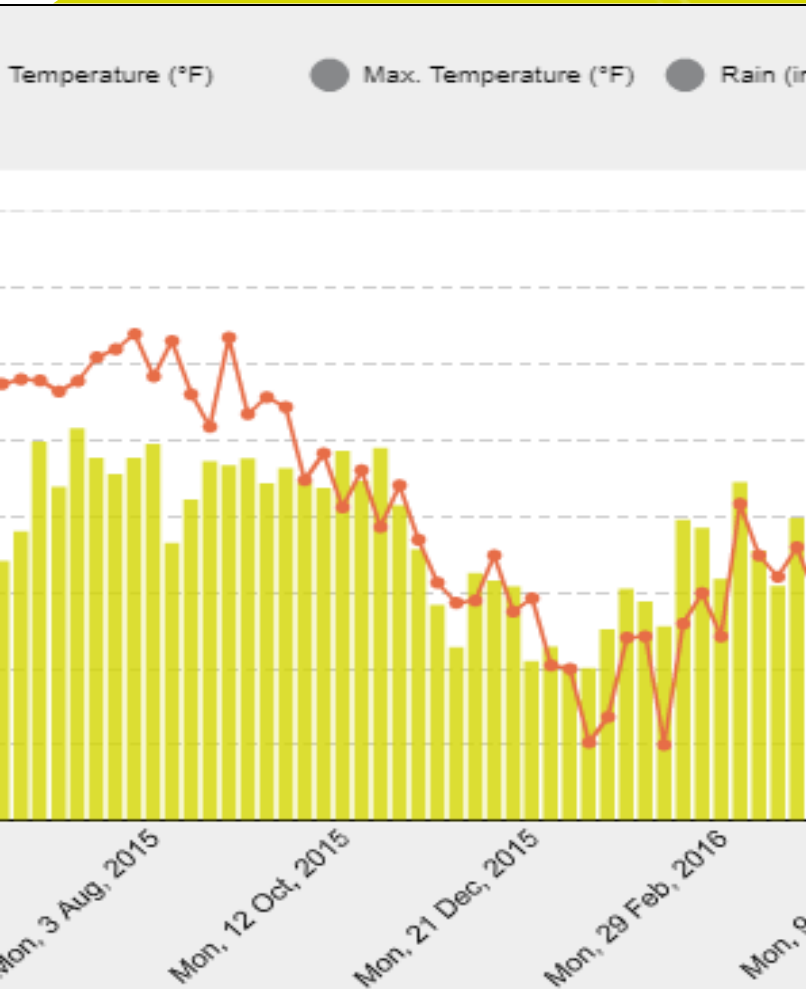
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Eco-Counter

The New Hampshire  
**COMPLETE STREETS CONFERENCE**  
Friday, October 19, 2018

Put your hand up if...

- To your knowledge, your community **collects** pedestrian or bicycle count data.
- You have **done a manual count** of pedestrian or bicycles count, or have **used automated counters**
- In your role, you **use** or **could benefit from** pedestrian or bicycle **count data**
- You have heard of Eco-Counter.

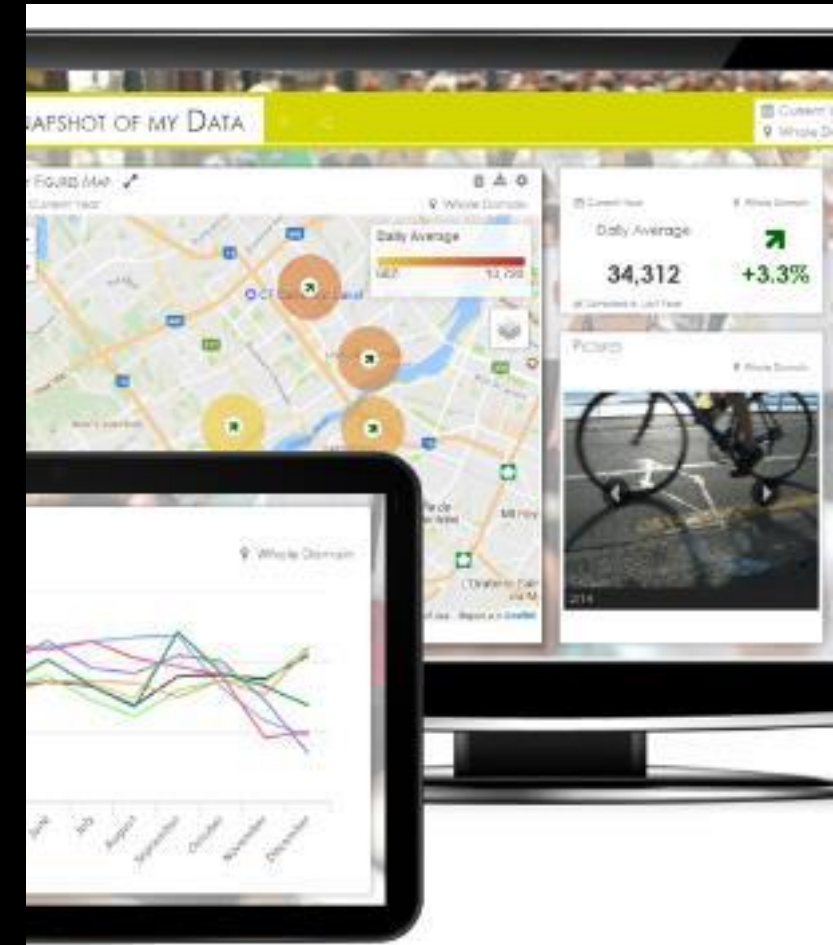
# What we do



Information about walking and cycling



Automated counters



Data management tools



# All kinds of ways to count



PYRO-Box



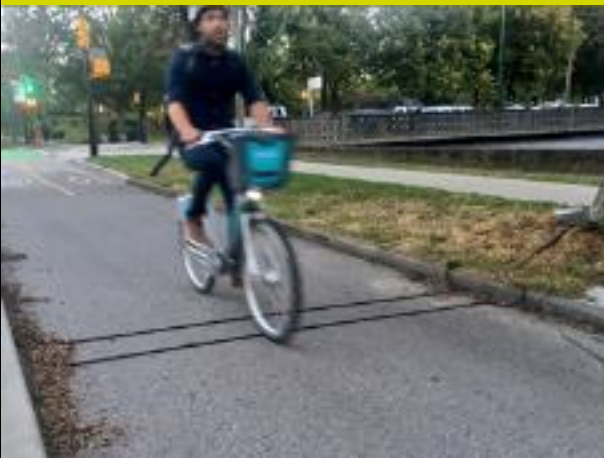
Urban POST



CITIX



ZELT



TUBE



PYRO in Post / MULTI



Mobile MULTI



Eco-DISPLAY Classic

## What is the Eco-Counter perspective?

- Over 500 organizations
- Specializing in pedestrian and bicycle counting for 15+ years
- Clientele network across cities, counties, MPOs and state DOTs
  - Including New Hampshire!
- View of partnership models
- View of established ped/bike count programs 5+ years in North America





# Why Count?

- Establish a baseline
- Observe demand and trends
- Evaluate a project
- Inform operations / management



# STRATEGIES

- Pilot project
- Integrate with transportation network
- Partnership or governance model
- Comprehensive plan

# 1. Pilot Project

- Trial period
- Test technology, sites or management
- Reporting process evolves
- Goals: baseline + evaluation

Pro: quick, flexible learning period, limited risk

Con: next steps can be undefined, funding sources vary,







# Hamilton, Ontario

- Started in 2011 with portable pedestrian counters
- “Graduated” to tube counters in 2013
- Helped to identify permanent sites for 2014/15
- Focused on permanent counters off-road 2016
- On-road bike counts continue where facilities exist, rotating locations
- Over 6 years, 100 sites, with 1-week samples for consecutive seasons



## 2. Integrate with network

- Link to AT infrastructure projects
- As sidewalks, bikeways, trails are built
- Data infrastructure concept
- Goals: trends, evaluation, operations

Pro: parallel processes for deployment,  
can be high-prov

Con: requires early buy-in, capital vs.  
operational dollars



# Boulder, Colorado

- Started with signature project
- First focused on bikes, then pedestrians
- Added permanent counter to corridor projects
- Starting to add retrofit site
- Currently rely on TMC for short-duration counts

## 'Eco-Totem' to count real-time cyclists in downtown Boulder

By Sarah Kuta

Camera Staff Writer

POSTED: 07/08/2014 07:21:39 PM MDT | UPDATED: 3 YEARS AGO



A cyclist passes an Eco-Totem sign, which will count how many people pass by on bikes, on 13th Street in Boulder. (Mark Leffingwell /



### 3. Partnership or governance

- Share ownership
- Distribute roles and responsibilities
- More organizations involved/aware

Pro: shared engagement and expertise

Con: responsibilities and ownership can be unclear





# Hawaii Institute of Public Health

- Based on active transportation as means of physical activity
- Initial project: pedestrian and bike display on Honolulu's first protected bike lanes
- Expanded to be inclusive to 4 counties states-wide
- Funding for portable counter and training to get started





## 4. Comprehensive Plan

- Site selection
- Installation
- Ownership / maintenance
- Data collection / reporting

Pro: inclusive approach, many stakeholders, pre-determined outcomes

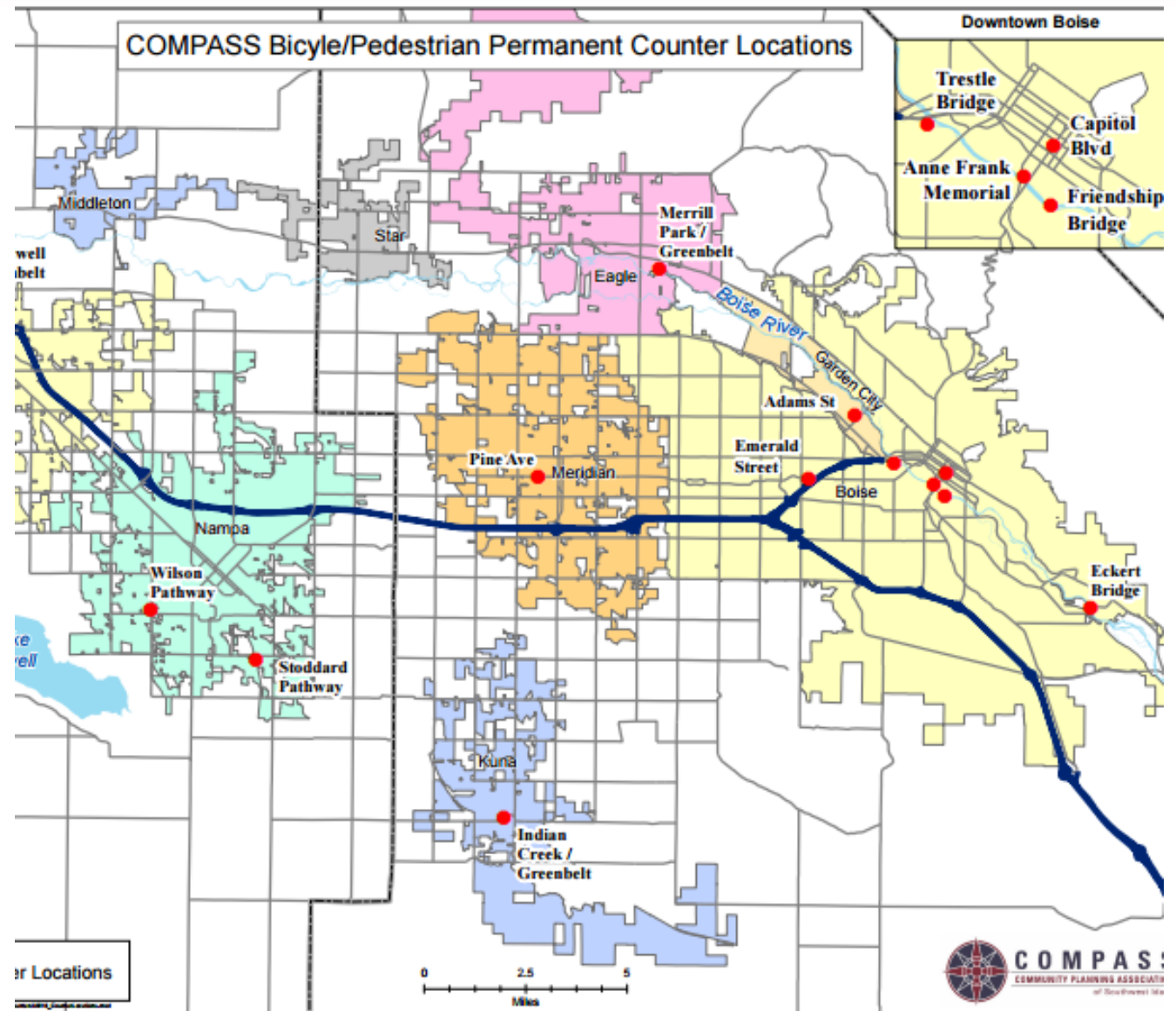
Con: time to develop + deploy





# COMPASS Idaho

- Key project of newly-formed AT working group in 2014
- Met regularly to discuss all things related to data and counters
- Installed 8 permanent counters in early 2015, need to be fair
- Adding sites to network each year
- View of on-going demand



# COMPASS Idaho

- Working group developed process for count requests
- Managed in-house: install and data reports, 1 month interval
- Started in 2016 with 20-30 requests, 100+ requests in 2017
- Current challenge: person hours, site review,
- Considering shift to a counter library
- Challenge/concerns: proper installation, care of equipment

## Products, Services, and Data

### Bicycle and Pedestrian Counting Equipment Request Form

To request the installation of equipment included in the COMPASS Automated Library, please complete the form below. Requests will be followed up within 2233. If you have any questions, please contact Tom Laws at [tlaws@compassidaho.org](mailto:tlaws@compassidaho.org). [Learn more about the types of counting equipment available in the library](#). [Download the hard copy form \(PDF\)](#).

**Borrowing agency:\***

**Representative name:\***

**Representative title:\***

**Items requested from the equipment library (please specify the number requested):\***

☐ On-road bicycle pneumatic tube counters (up to 8 available)

☐ Off-road bicycle pneumatic tube counters (up to 4 available)

☐ Off-road bicycle magnetometer counters (up to 8 available)

☐ Urban pedestrian infrared counters (up to 6 available)

☐ Rural/off-road pedestrian infrared counters (up to 8 available)

**Month requested:\***

**Location description:\***

Please include a clear description as to where the counters should be placed.

**Optional: Upload an image/sketch of location**

No file chosen

**Purpose for borrowing equipment:\***



**MORE EXAMPLES**



Pilot

# Saskatoon, Saskatchewan

- Population: 250,000
- First protected bike lanes
- Long-term pilot project > 1 year
- Everything temporary
- Move or reuse counters per expansion and construction





# Shippagan + Bathurst New Brunswick

Partner

- Shippagan: New Brunswick Trails
  - Pop: 2500 people
  - Multi-use counter
  - Motivated to understand ATV impact
  - Daily 60 / 40 – bike / ped
  - Very few ATV < 10 in a month
- Bathurst: Daly Point Nature Reserve
  - Pop: 12,000 people
  - Trail counter at park entrance
  - City purchased, managed by reserve
  - Year-round visitor since Jan 2017
  - Avg 75 daily, ranges 100 to >500

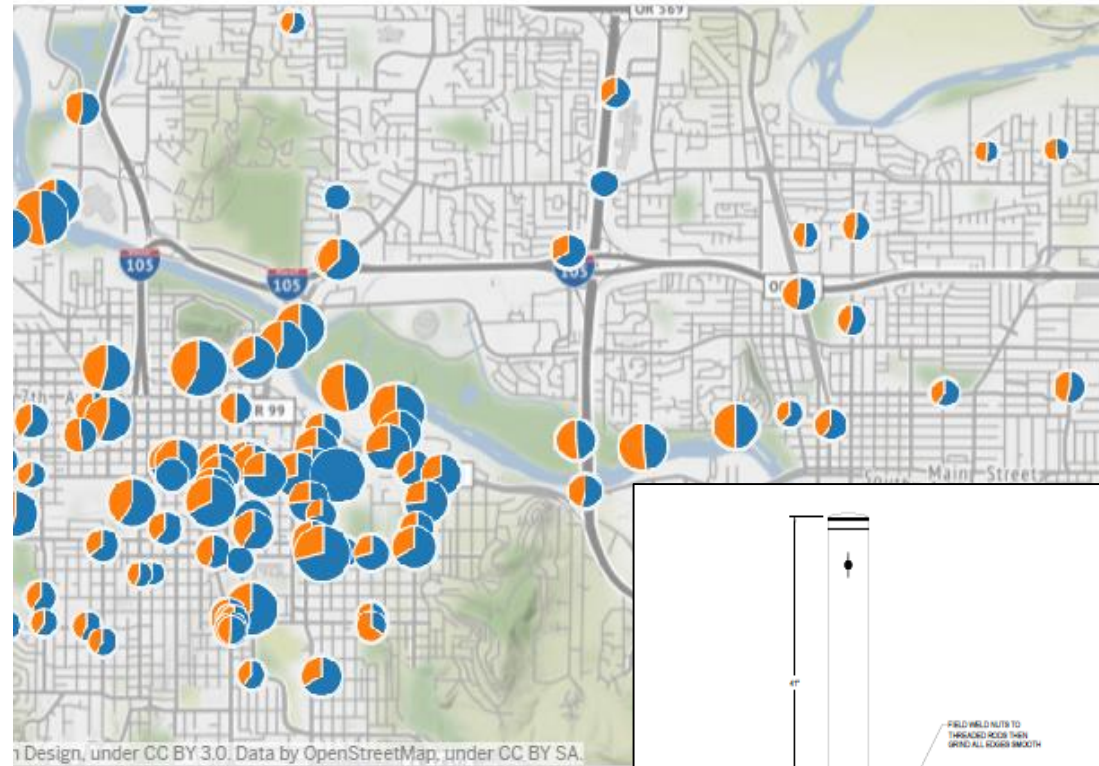


# Lane COG, Oregon

- Biggest cities: Eugene (150,000) and Springfield (60,000)
- 7 years in development
- First few years: focus on cycling, short-duration
- Next phase: pedestrian counts
- Used to apply for federal funds, installed permanent stations
- Partners with Eugene for technical expertise

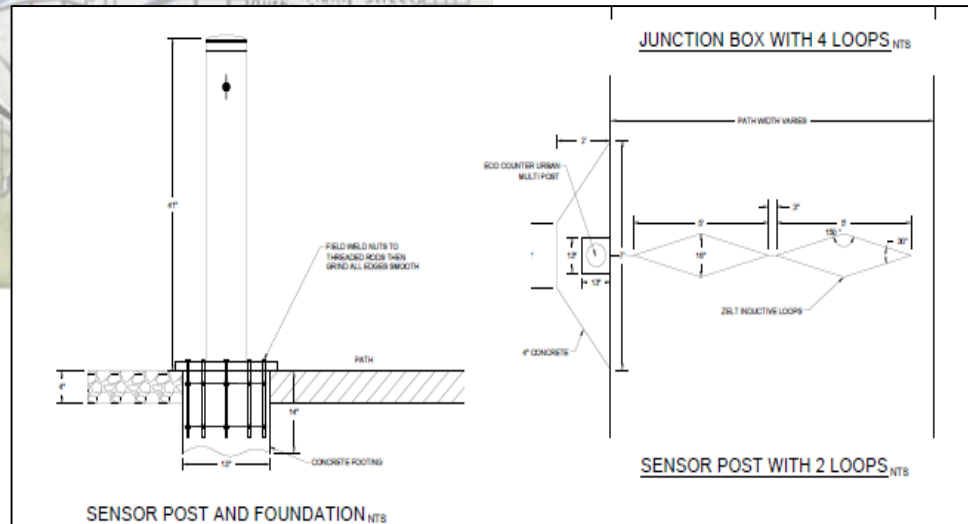
## Bicycle Counts in Central Lane MPO Area

Select location(s) on map to see average daily counts, aggregated by year and season, and count shares by time of day at selected location(s). Click on bar chart to show counts (and count locations) for a specific year and/or season. Click again to release selection, or make a new selection to see count locations in outlying areas, such as Coburn.



Pilot

Partner





# Calgary, Alberta

Network

Pilot

Plan

- Large city, auto-oriented, 1M
- 5 years in development
- First projects to test technologies, short-term bike counts
- Key project: pilot downtown bike grid (2 years)
- Supplement to all other data collection
- Good practices: public data, cross-department collaboration, defined plan



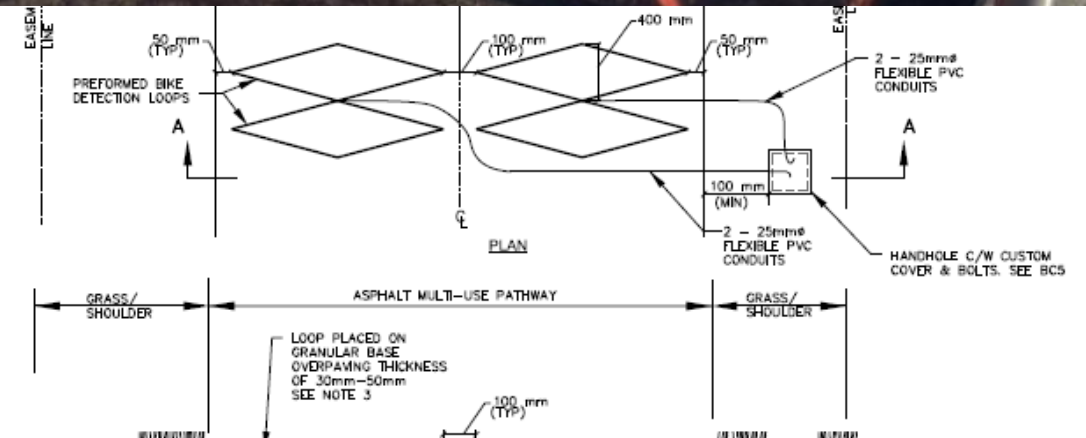
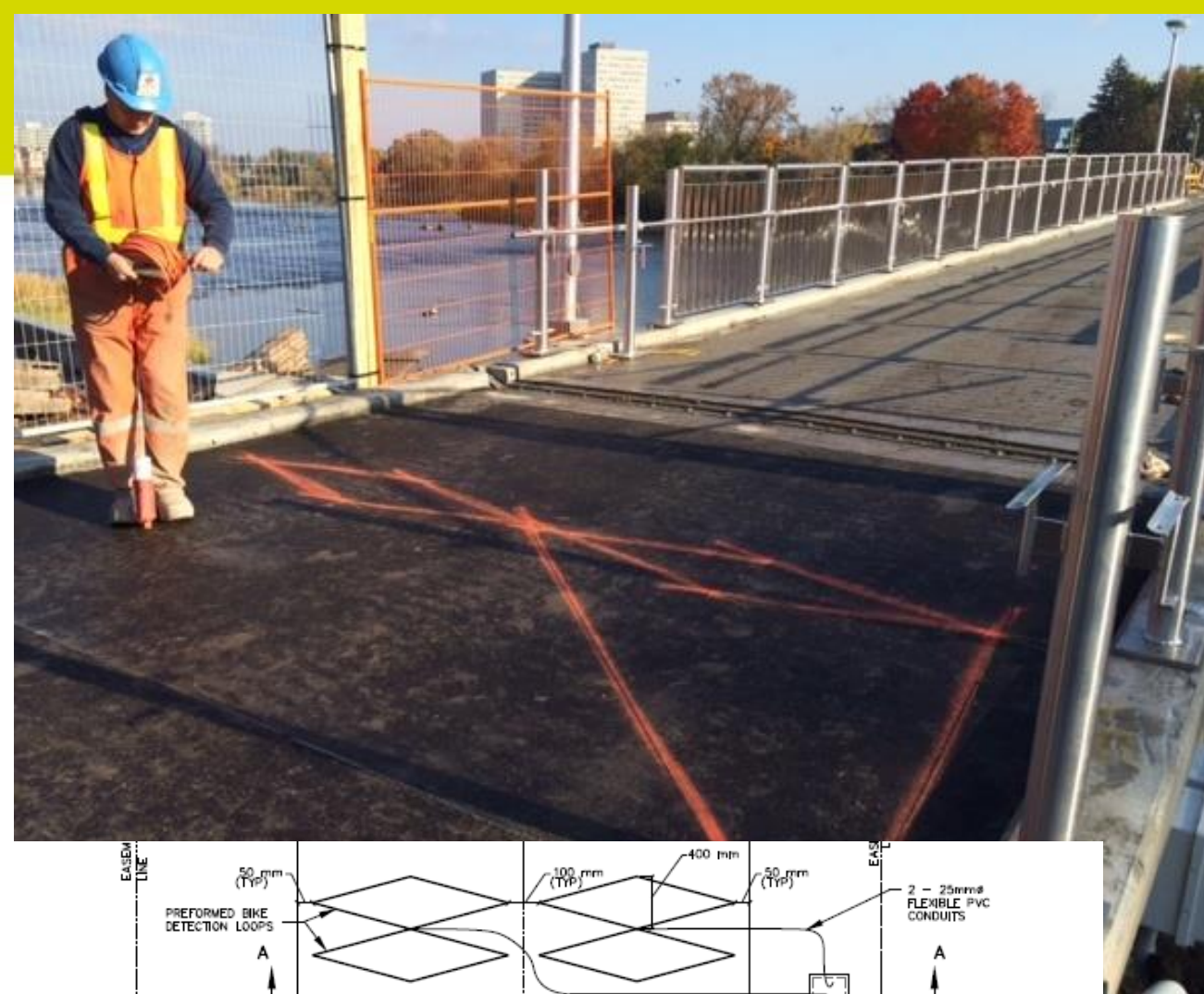
# Ottawa Ontario

Network

Pilot

Plan

- Large city, capital district, 1M
- 8 years in development
- First pilots: permanent bike count stations (urban sites)
- Shift to rural and trail sites
- Key practices to success: design standards, maintenance program, rotating contractors
- Gradual expansion from 10 to 30 sites





## Other practices and ideas

- PILOT: part of grant applications
- NETWORK: site selection by key corridors: bridges, trails, signature projects
- PARTNER: complement to manual counts by volunteers
- PLAN: counter specifications within project tender





## TIPS AND ADVICE

# Key factors to successful program

- Ownership
  - Remember the goal
  - Be willing to take the lead
- Awareness:
  - Share your data!
  - Centralize information
- Manageability:
  - Keep long view, one step at a time
  - Adjust approach to staff/org strengths
  - Balance gaining experience vs. more sites





# Words of wisdom



## Have a story

Have a story to tell from the data. It's okay to start small. People respond well to information presented in a clear way.

– Ellen Currier, Lane County COG

## Be patient

Be patient. There will be set backs, but I never heard a comment that the audience did not want this data

–Steve Molloy, Hamilton

## Don't get discouraged

Don't get discouraged by other cities. It may seem a lot to learn, but you get something really valuable with 24h data.

• –Tom Laws, COMPASS

Thank you!

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